

IN THE SPECIFICATION:

Please amend the specification as follows:

Please substitute the paragraph beginning at page 2, line 24, and ending on page 3, line 8, with the following.

B2 -- In this manner, in the measurement of curvature of field, in relation to each view angle position, images of reference patterns are transferred to a single photosensitive member, under different defocus conditions. With respect to each view angle position, by comparing transferred defocus images, a sharpest image is chosen and the corresponding defocus position is determined as the image plane position. The comparison of the reference pattern images is based on observation using a microscope, for example. Then, the image plane positions determined at each view angle positions are compared with each other, by which the curvature of field inside the view angle of the lens 5 to be inspected can be obtained. --

Please substitute the paragraph beginning at page 5, line 19, and ending on page 6, line 6, with the following.

B3 -- Similarly, the image plane position  $DZ(x, y)$  of the measurement point  $i$  having  $a$  coordinates  $(x, y)$  is determined by the defocus component of the measured wavefront as well as the  $Z$  coordinates of the TS lens focal point and the RS mirror curvature center, and it can be given by the following equation:

$$DZ(x, y) =$$

$$TSZ(x, y) - TSZ(0,0) + \beta \{ (RSZ(x, 2) - (RSZ(0, 0)) +$$

$$DZ0(x, y) - DZ0(0,0)$$

wherein  $DZ_0(0, 0)$  is the defocus component obtained from the transmission wavefront at an origin  $(0, 0)$ , which is the image point on the optical axis,  $TSZ(x, y)$  and  $RSZ(x, y)$  are measured values of Z coordinates of the TS lens focal point and RS mirror curvature center at the point  $(x, y)$ , respectively, and  $TSZ(0, 0)$  and  $RSZ(0, 0)$  are measured values of Z coordinates of the TS lens focal point and RS mirror curvature center at the origin  $(0, 0)$ , respectively. --

Please substitute the paragraph beginning at page 11, line 23, and ending on page 12, line 16, with the following.

-- The RS mirror 9 and the drift value referring RS mirror 25 can be scanningly moved in the optical axis direction by means of a piezoelectric device, for example. At each scan ~~positions~~ position, an interference fringe due to the drift value referring reference wave and the drift value referring detection wave (hereinafter, first interference fringe), as well as an interference fringe due to the reference wave and the detection wave (hereinafter, second interference fringe) are measured by a camera inside the interferometer major assembly, as the intensity data. The measurement result is transmitted to a host computer, and transmission wavefronts (hereinafter, first transmission wavefront and second transmission wavefront) are calculated as phase data of the first and second interference fringes. The interference fringe measurement uses a fringe scan method, such that high precision phase measurement is enabled. The camera inside the interferometer major assembly, for detecting the interference fringe intensity may be provided in two independent channels for the first and second interference fringes, separately, or it may be provided in a single channel structure wherein both of the first and second interference fringes are detected by a one and the same camera. --

Please substitute the paragraph beginning at page 12, line 26, and ending on page 13, line 6, with the following.

B5  
-- In the position coordinates measurement, a mirror is disposed at a position close to both points, and this mirror position is measured by using an interference distance gauge, for example. ~~Where~~ When the measurement is carried out by using a mirror placed away from the both points, the posture of the TS lens and RS mirror (i.e., pitching, yawing and rolling) may be measured so that the distance between the measurement point and the idealistic measurement point can be corrected. --

Please substitute the paragraph beginning at page 14, line 4, with the following.

B6  
-- Subsequently, measurement of the transmission wavefront is performed at the i-th measurement point. Simultaneously, the position coordinates of the TS lens rear focal point, RS mirror curvature center, the drift value referring TRS lens near focal point, and the drift value referring RS mirror curvature center are determined. Here, the transmission wavefront, which is obtainable from a standard point for referring to the drift value, is called a first transmission wavefront, and the transmission wavefront, which is obtainable from the i-th measurement point, is called a second transmission wavefront. --

Please substitute the paragraph beginning at page 18, line 7, with the following.

B7  
-- The correction formulae mentioned above are determined while taking the variation quantities with respect to time of each measurement image ~~points~~ point as a linear complement to the variation quantity with respect to time of the standard image point. Here,  $DX_{dc}(X_i, Y_i)$  and

Concluded  
B1

DY<sub>dc</sub> (X<sub>i</sub>, Y<sub>i</sub>) are distortion at the i-th measurement point after correction of the variation with respect to time, DX (X<sub>i</sub>, Y<sub>i</sub>) and DY (X<sub>i</sub>, Y<sub>i</sub>) are measured values of distortion at the i-th measurement point, and DX<sub>0</sub> and DY<sub>0</sub> are distortion at the standard image point. Each argument show shows the correspondence of the measurement at the standard image point to the number of measurement point points. Also, the argument "1" shows that the first measurement is to the standard image point. --

Please substitute the paragraph beginning at page 19, line 24, and ending on page 20, line 4, with the following.

B8

-- Figure 3 shows the structure of a third embodiment according to the present invention. While the first embodiment uses two sets of TS lenses and RS mirrors, this embodiment uses plural sets of TS lenses and RS mirrors, to enable simultaneous measurement at plural measurement points in addition to the standard image point. Because of the increase in a number of TS lenses and RS mirrors, independent motion of each TS lens and RS mirror is not adopted in this embodiment. --

Please substitute the paragraph beginning at page 20, line 5, with the following.

B9

-- The curvature centers of each spherical mirrors mirror of the RS mirror group 33 are disposed to satisfy the conjugate relation with the rear focal points of corresponding lenses of the TS lens group 32. Namely, where when the position coordinates of the rear focal point of the i-th TS lens are expressed as (TSX<sub>i</sub>, TSY<sub>i</sub>) while taking the optical axis as an origin, the position (RSX<sub>i</sub>, RSY<sub>i</sub>) of the curvature center of the i-th RS mirror is given by the following equations:

$$RSXi = TSXi/\beta$$

$$RSYi = TSYi/\beta$$

where  $\beta$  is the idealistic imaging magnification of the lens 5 being inspected. --

Please substitute the paragraph beginning at page 26, line 15, with the following.

-- Simultaneously with the wavefront measurement at the standard image point, referring to the drift value, and at the remaining measurement points, the position coordinates of the rear focal points of the collimator lenses 34 and 55 and the curvature centers of the RS mirrors 9 and 25 can be measured, in a similar way as in the first embodiment. --